

PHENIX WEEKLY PLANNING

5/22/2008

Don Lynch

Shutdown '08 Schedule

Technical Support 2008

Shutdown Prep

Mu Trigger, RPC Prototype Installation,
New Beampipe, CM Crane, Sta. 1 and MMN

Scaffolding Reviews

RPC Prototype C tests (in tent)

Install/field fit CM access stairs

Build MMN scaffolding

Build Sta. 1 N. scaffolding

MuTr Decapacitations (Sta. 1 N and MMN)

RPC Prototype D tests (in tent)

Design RPC installation fixtures &

MuTrigger FEE platforms

Prep work for Mutrgr platforms (water/elec)

Prep work for RPC proptotype install

move (7) MuID pipes

move gap 5 south cable tray

End of run Party



Done

All Done, Action Items in progress

in progress

in progress

5/22

5/26

6/2

Apr-May

In progress

May-June

May-June

May 30

Shutdown '08 Schedule, cont'd

Technical Support 2008

Prep RPC Proto, MuTrggr FEE N&S Racks Apr-July	
RPC engineering & safety review	mid June
MuTrigger FEE N Install	July - Aug.
Install MuTrigger N cooling water & air	July - Aug.
RPC prototype gas system	July - Aug
Move shielding for RPC prototype installation	July - Sep
RPC prototype cable routing & support	July - Aug
Modify crystal palace & vapor barrier	July - Aug
Install MuTrigger FEE N platform&Rack	July 15 - Aug 1
RPC prototype install	Sep.-Oct. (RPC2 - PHENIX) (RPC3 - C. Pearson)
Install RPC prototype rack in tunnel south	Sep.
Install Mutrigger FEE's in MMS for RPC test	Sep.
Install MuTrigger FEE South platform	Sep.
Install MuTrgr S rack cooling & electric	Sep.
HBD Install	Sep.-Oct.
Connect electronics/gas/water/air for RPC	Sep. - Nov.
Install MuTrigger N& S racks	Sep. - Nov
PC1 west work (needs planning)	Sep. - Nov.
CM Crane Install	Oct.
DC East?/West Repairs	Oct. - Nov.
Replace tunnel shielding	Nov. (C. Pearson)

Shutdown '08 Schedule, cont'd

Remove all inst'n equipment(e.g. scaffolds)	Oct. - Nov
Gap 5 north piping and cable tray re-loc.	Oct. - Dec.
Gap 2 north cable tray & crate re-mounts	Oct. - Dec
Fan Tray maintenance	Oct. - Dec.
Prep for shutdown 2009	Nov. - Dec
Prep for run 9	Dec
Close shield wall start shifts	Dec.
Start physics	Jan 1

Shutdown '08 Electrician Work

- 1) Install 30KVA UPS in Rack Room.
Done
- 2) Install HVAC cooling and/or fan power circuits into RPC tent. Install fans/cooling units.
- 3) Run Power to new MuTrgr FEE racks on MMN and MMS
- 4) Install power and signal cable tray (ceiling suspended) for new DCM rack row - north of existing DCM racks.
- 5) Assist in signal cable installation for MuTr/RPC upgrades as necessary.
- 6) Upgrade power capacity of Central Magnet power distribution for future bridge rack loads.
 - a) Remove existing 15KVA transformer and install 45KVA unit.
 - b) Install new (larger size) power cable from rack room to Central Magnet distribution breaker panels.
- 7) Install power feeds to RPC north & south tunnel racks from IR power panels.
NOTE: MuTr north power panel has no available breakers to feed north tunnel racks (south panel has spare breakers for use). More engineering analysis is required to determine if the north power panel should be increased in size or for installation of a sub panel branch can be accomplished.
- 8) Install 120 volt AC power drops into new control room annunciator alarm rack (rack room).

Work Permit Requirements

- CM Crane Installation
- RPC Prototype Installation
- HBD re-installation
- PC1 Repairs

These WP's not needed until Sept.

(More will be needed - to be added to the list as appropriate)

Shutdown Work \$\$\$

PHENIC Engineering and Technical Support Group

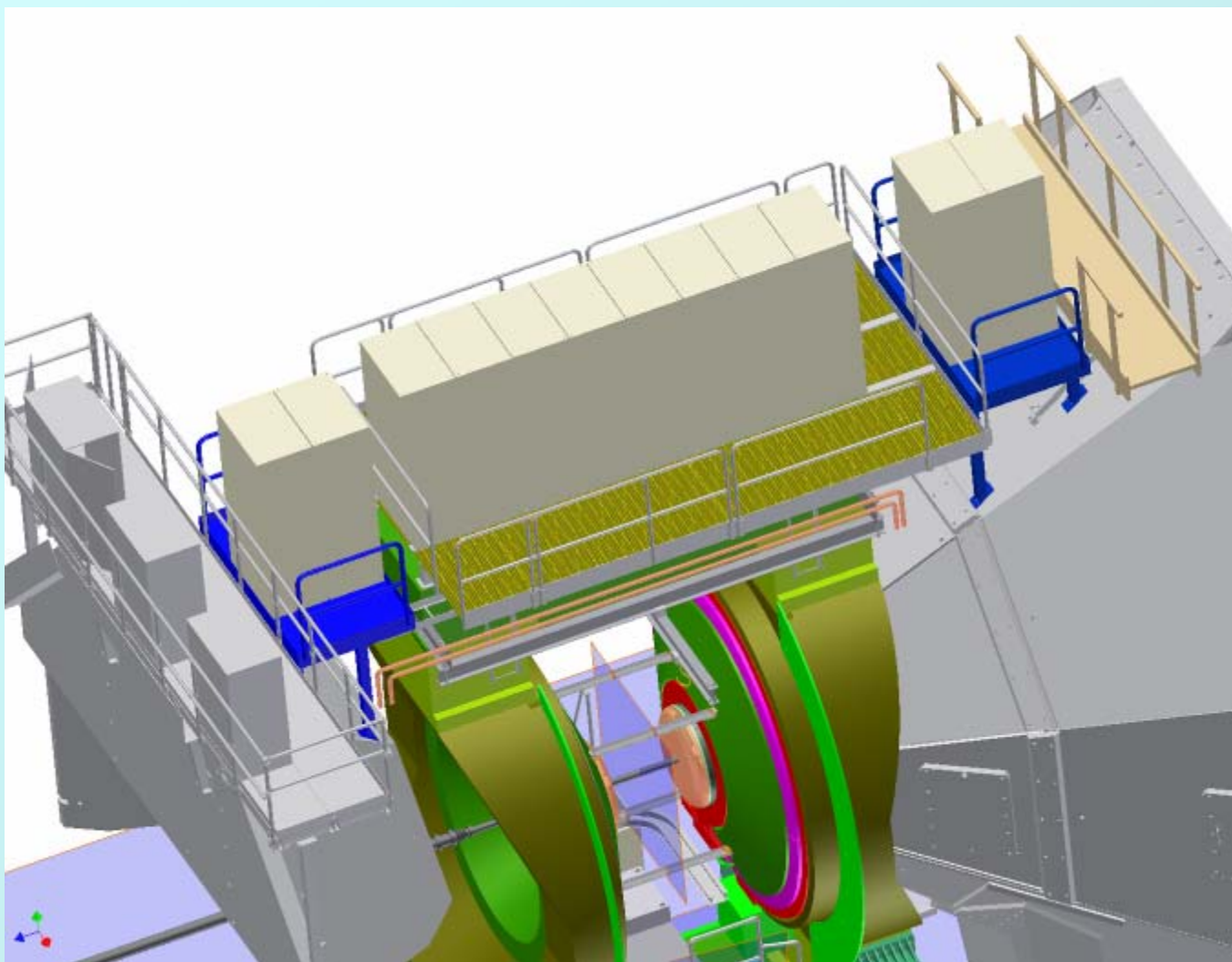


Spreadsheets updated, please review/correct/return to D. Lynch ASAP.

Projects Include:

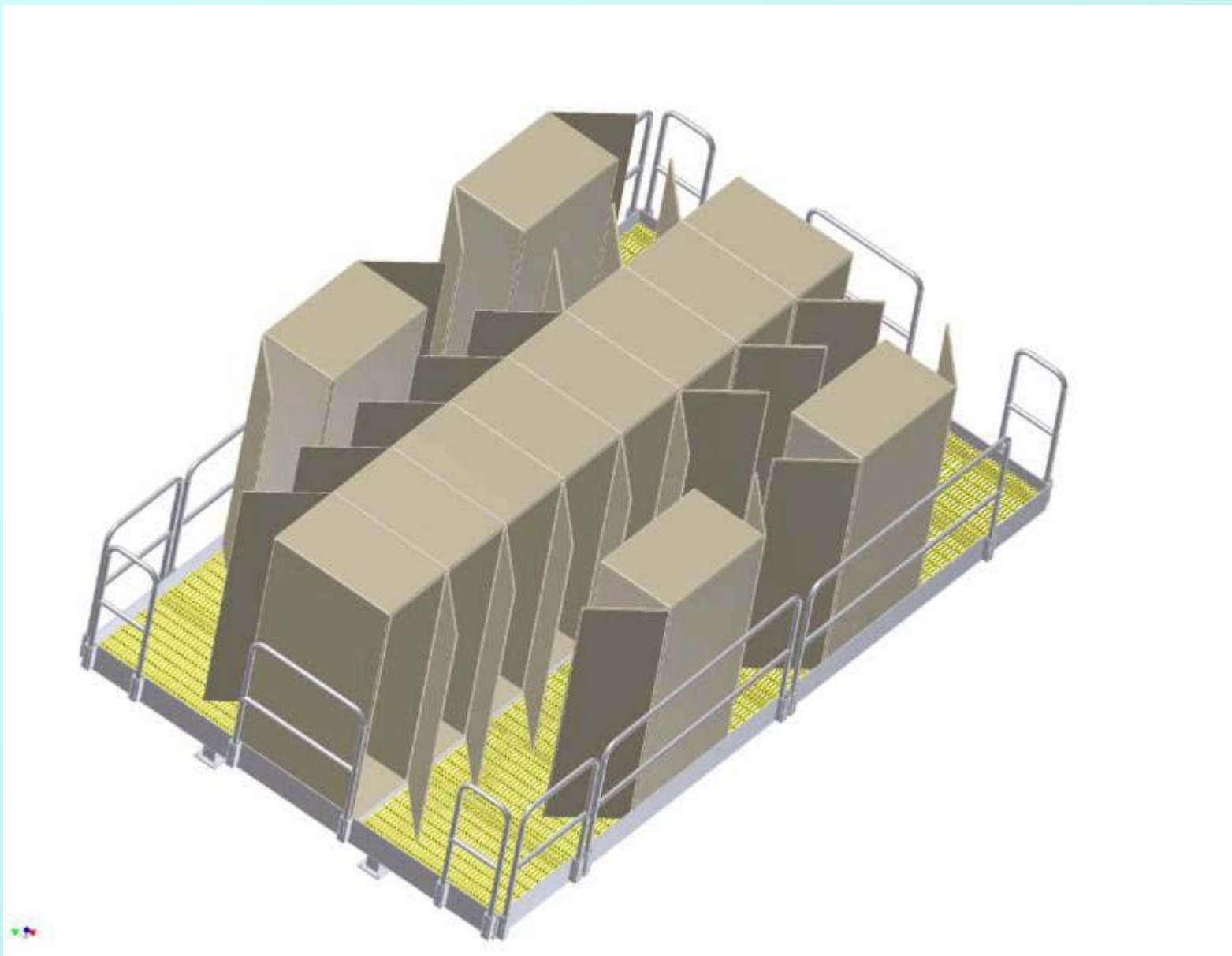
1. CM Crane
2. New 40 mm ID beampipe
3. RPC Factory
4. RPC Prototype Installation
5. RPC Final Installation
6. MuTrigger FEE Upgrade
7. CM Access Stairs
8. MuTr Decapitations
9. Gas House Reorganization maintenance
10. Bridge Rework
11. HBD Re-installation
12. DC East & West Repairs
13. PC1 Repair
14. Rack room UPS upgrade
15. Bridge Power upgrade
16. Rack Room Update
17. Detector Rack Fan tray replacement
18. Safety System Upgrade
19. Cooling Water system upgrade
20. DAQ/Trigger Upgrade
21. DCM II Development
22. VTX support
23. FVTX support
24. NCC support

MuTrgr North FEE Rack Platform

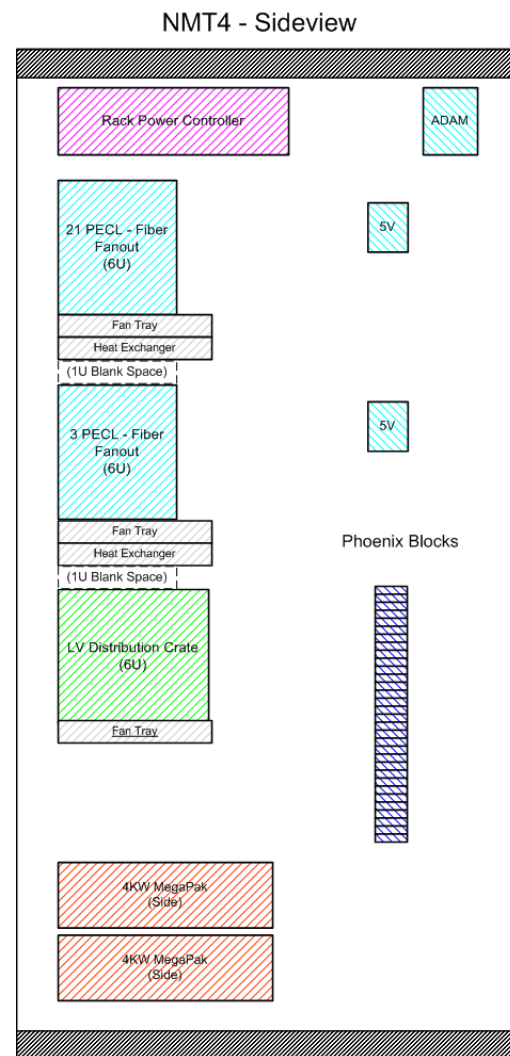
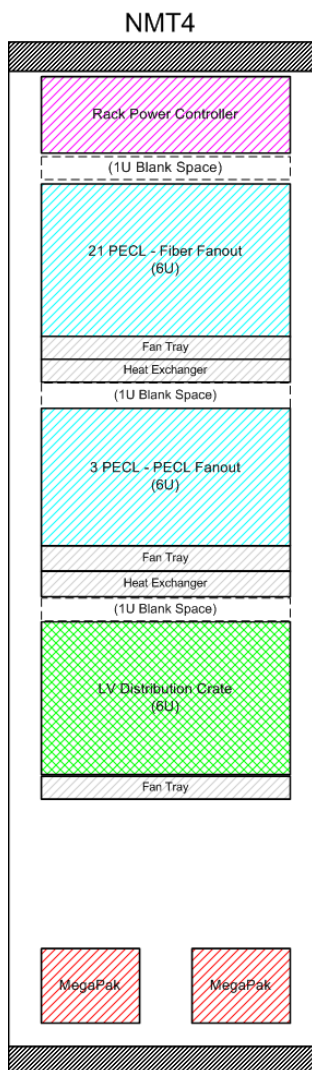


Technical Support 2008

5/22/08

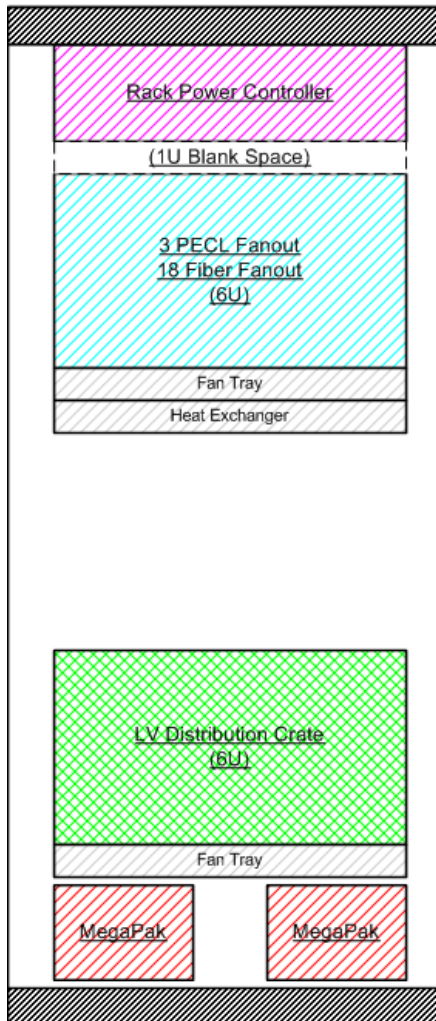


MuTrigger North Rack

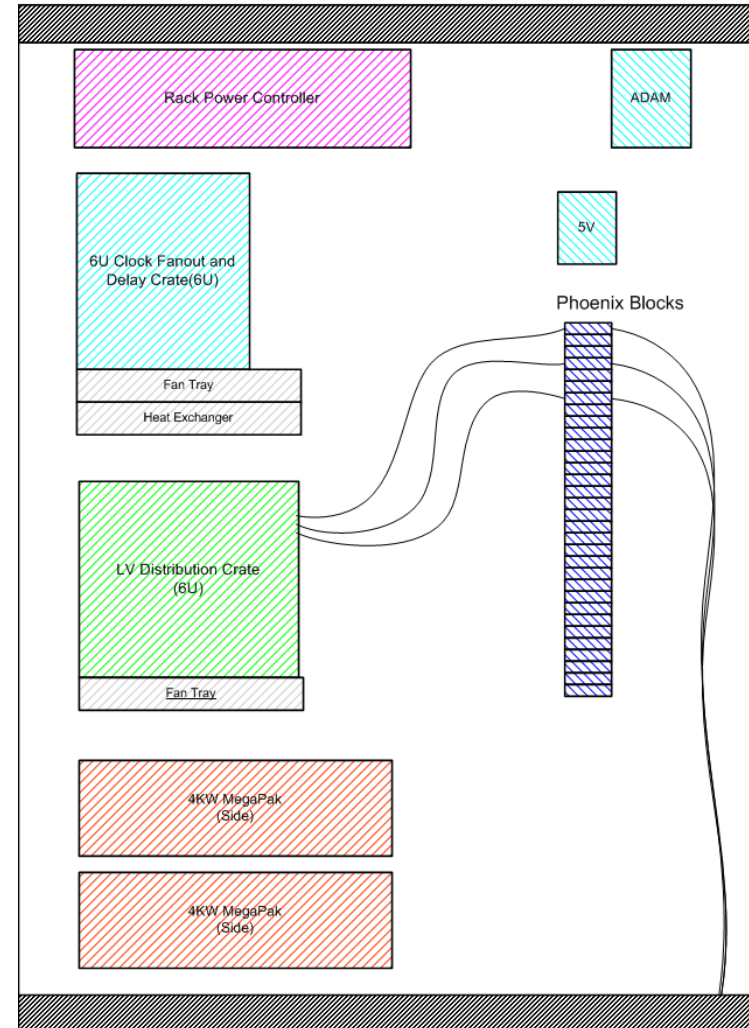


MuTrigger South Rack

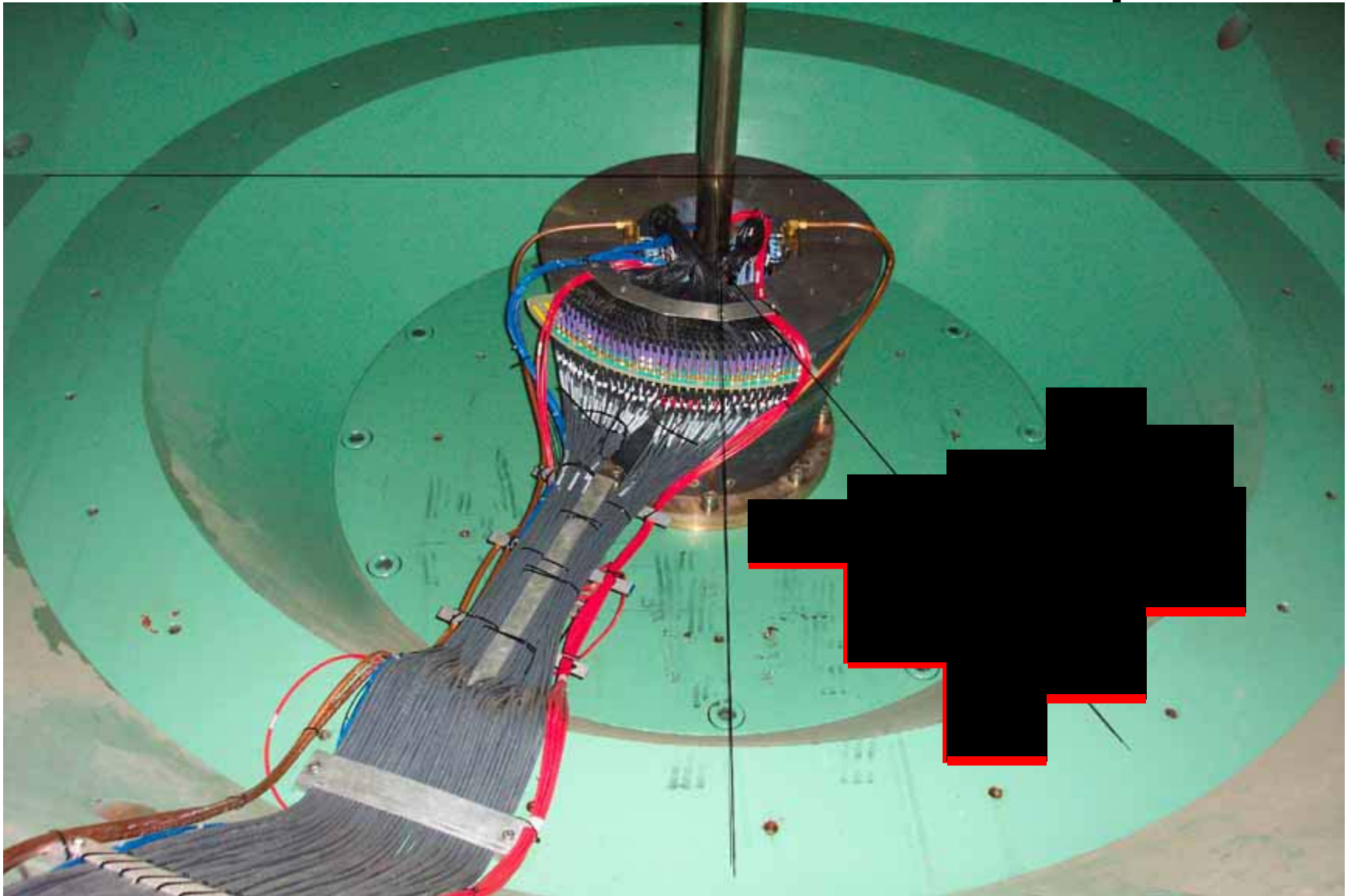
SMT4



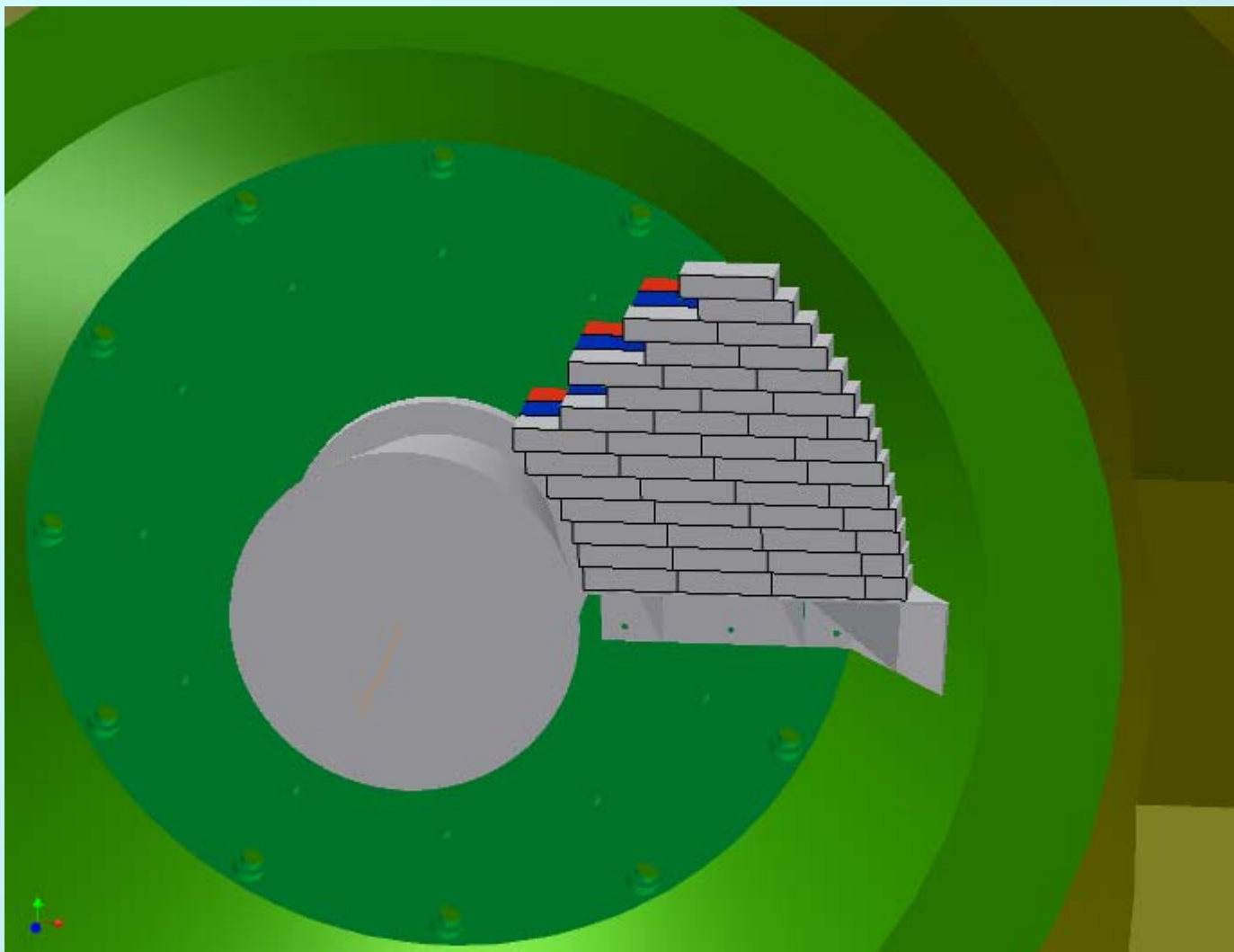
SMT4
(Sideview)



Shelf & Pb brick concept

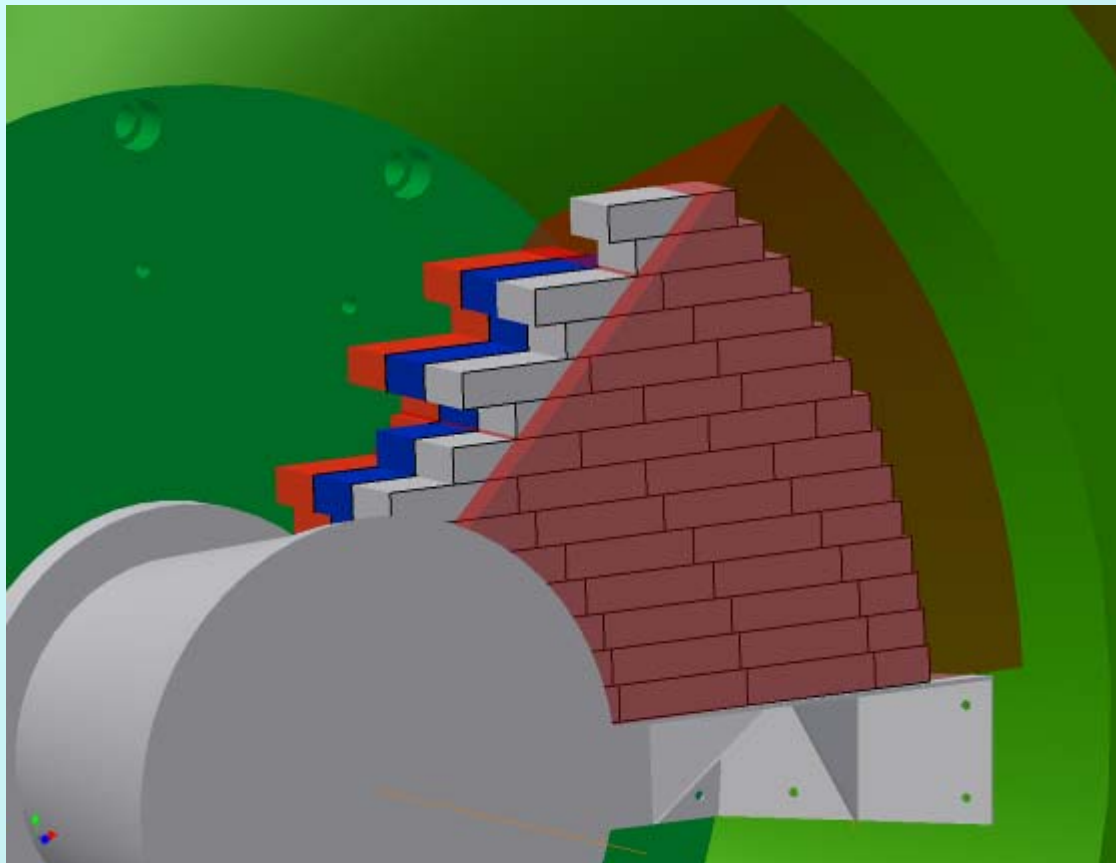


RPC Absorber Concept



Technical Support 2008

RPC Absorber Concept



Uses 112 2x4x8
PB bricks, 22
need to be cut

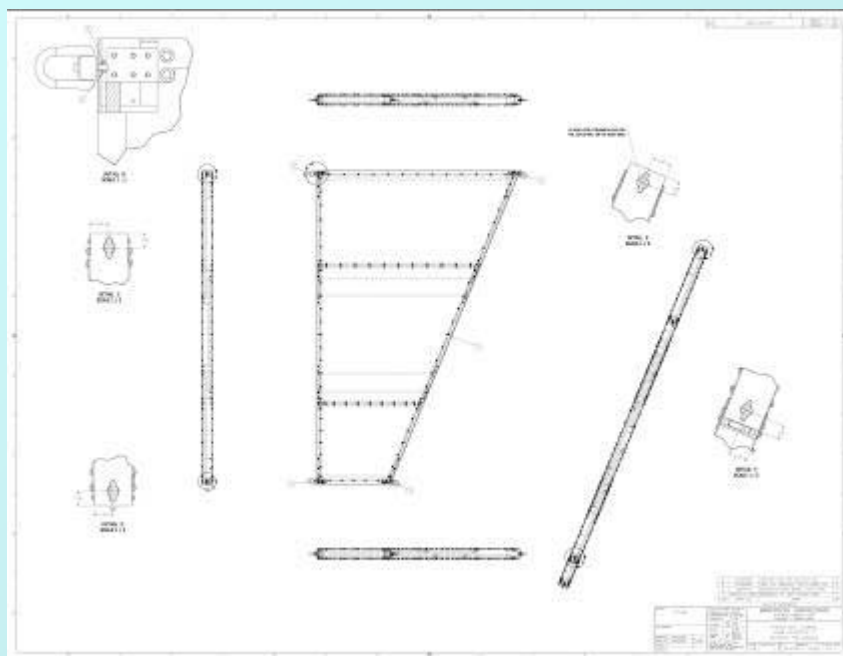
12 inches deep
(RPC group
requested 35 mm
(13.8 in))

RPC Prototype

Rec'd dim's and lifting points from Larry B.

Need to decide on prototype orientation and alignment for Sta 1 & 2 based on absorber location.

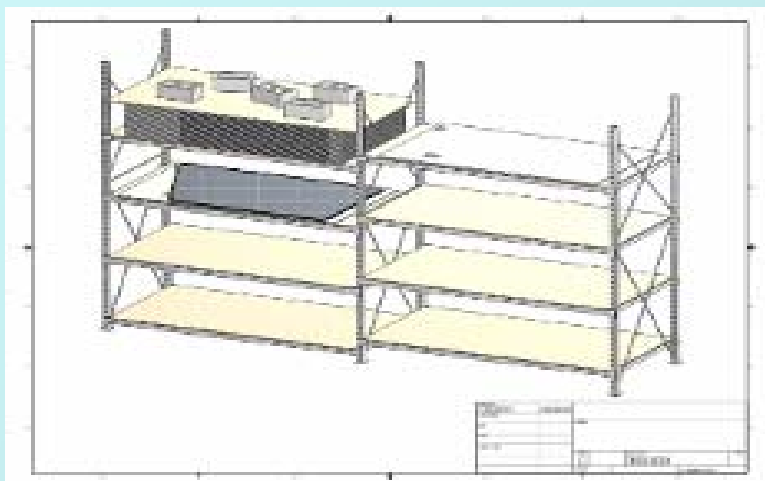
Technical Support 2008



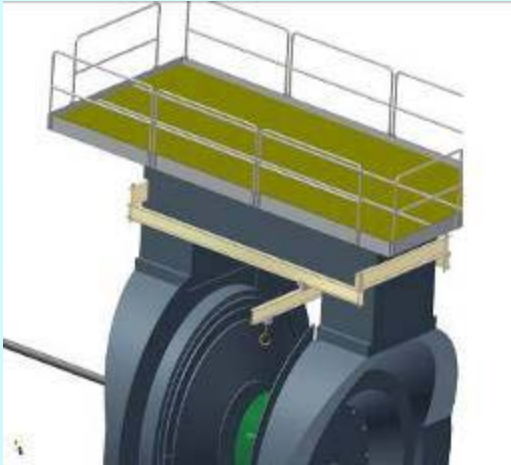
(2) ~1 Ton thru-the-wall AC's
available from CA-D

208V Need isolated electrical source

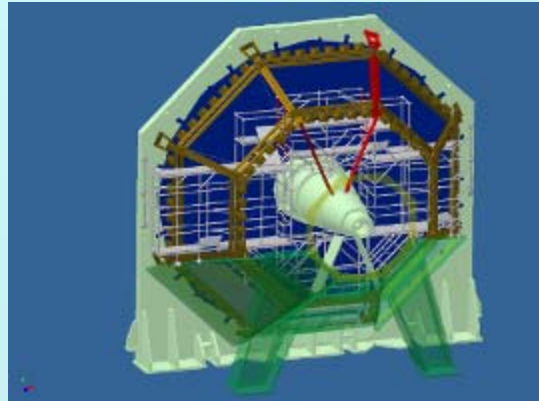
Storage Shelving: 2 additional sets
rec'd. Kenny is assembling them.



Combined CM Crane, MMN & Station 1 scaffolding Review



Crane installation
Postponed until fall



Station 1 platforms rec'd. Remaining
components due ~5/28

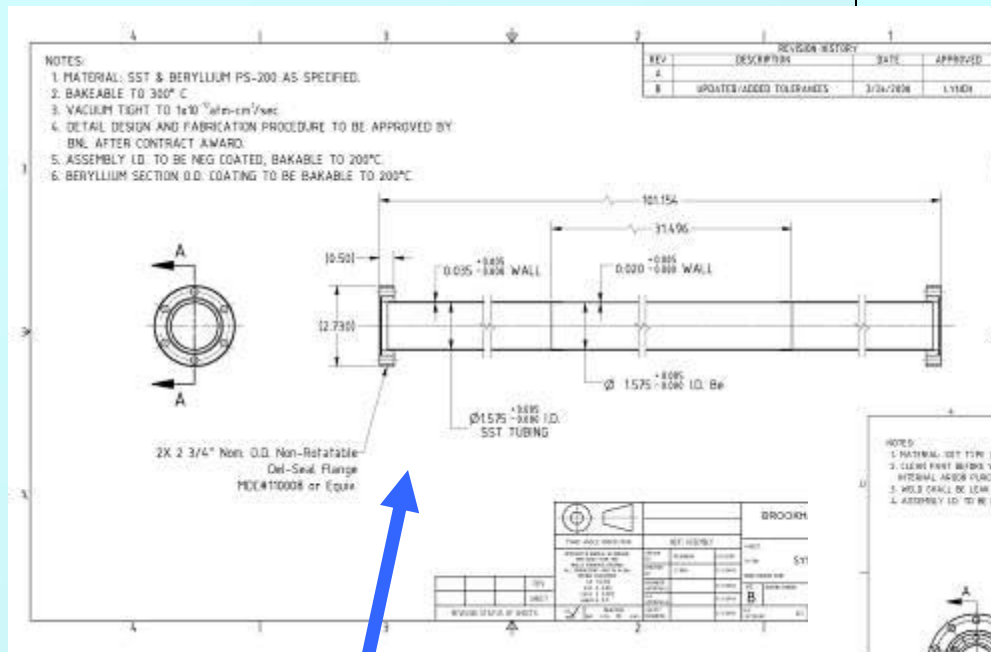
WP is approved

Station 2/3 construction is underway

New Beampipe Design & Review

BP designs at SAES for NEG quote. Meet w/ Brush Wellman 5/19

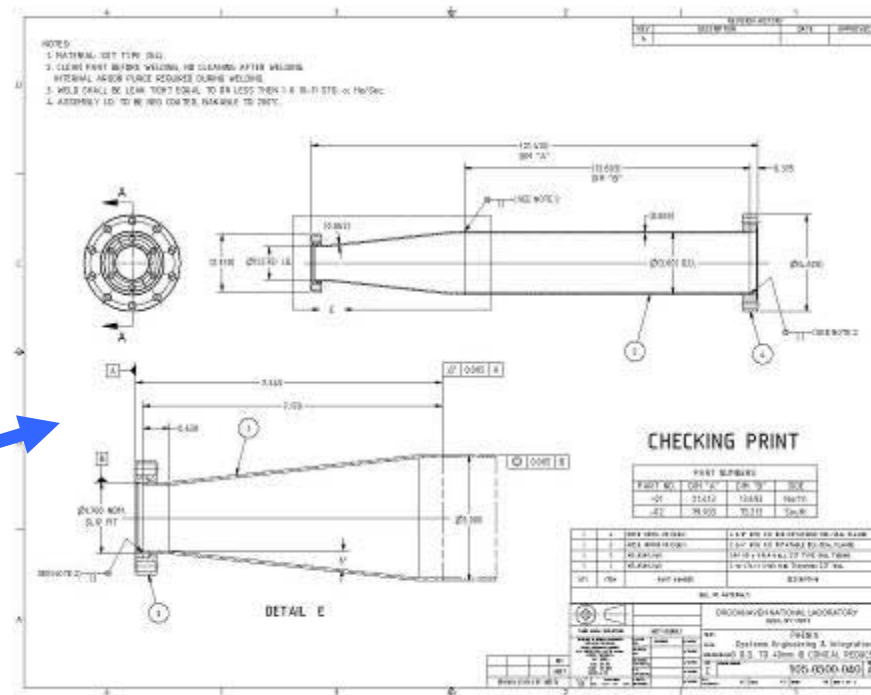
Technical Support 2008



SS/Be central beampipe

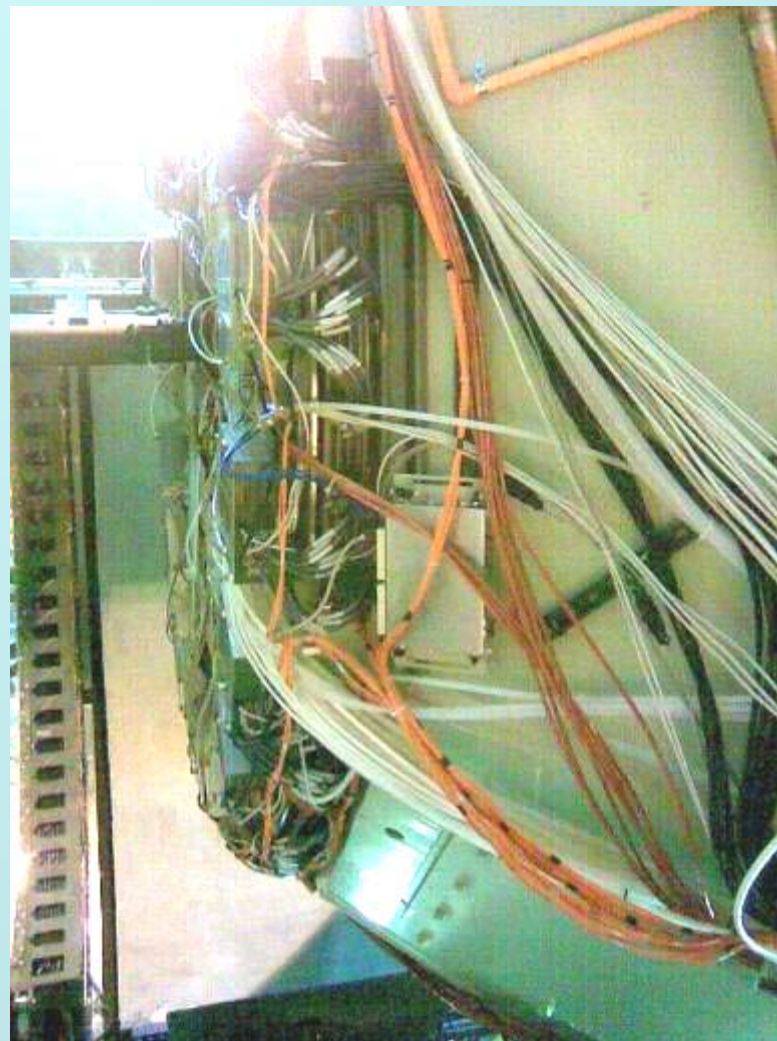
1-5/8" to 3" transitions

Drawings Done, C-A getting Quotes for NEG coating



Station 1 MuTrigger FEE's

Technical Support 2008



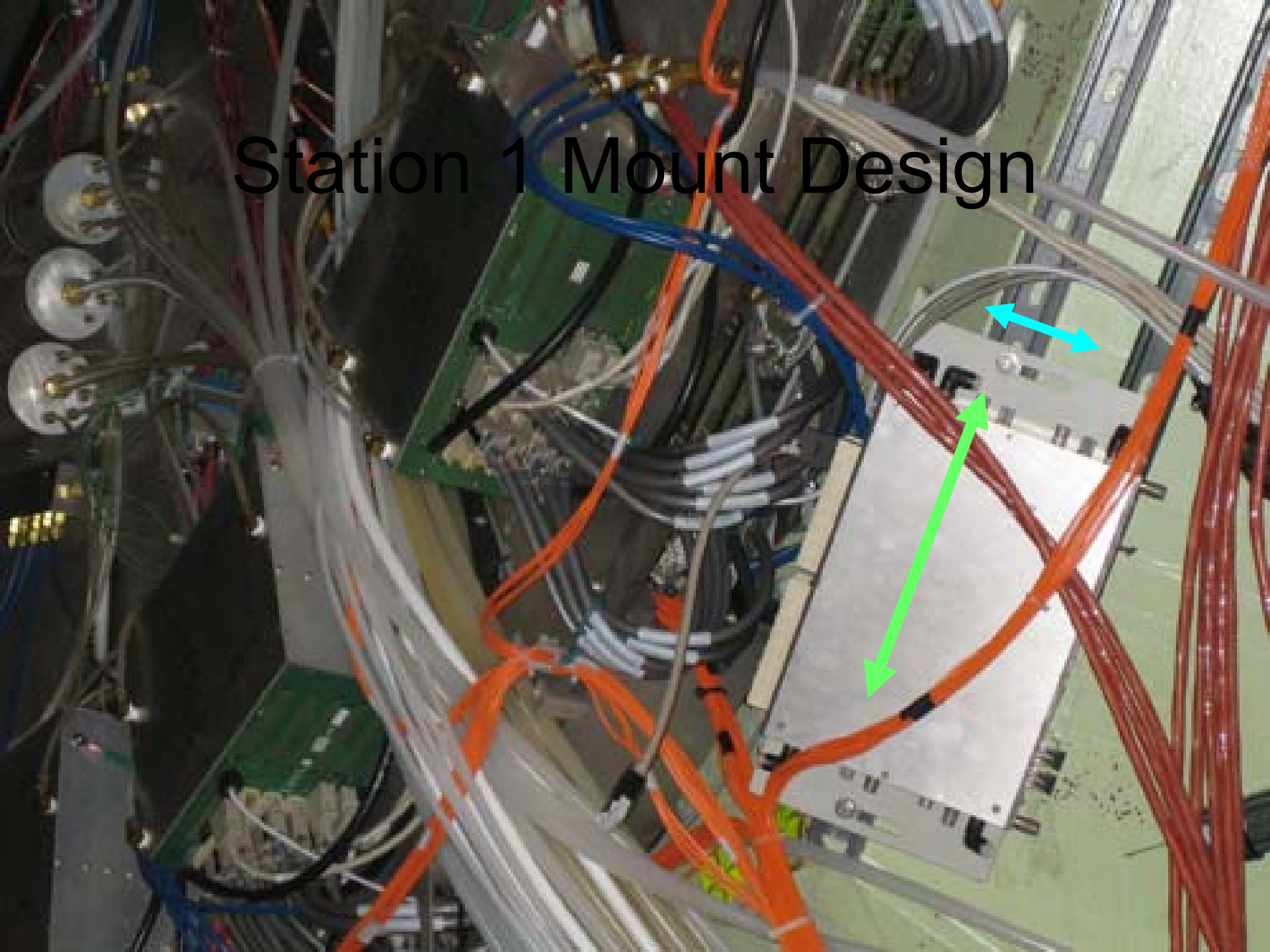
5/22/08

Station-1 Mount

RIKEN/RBRC

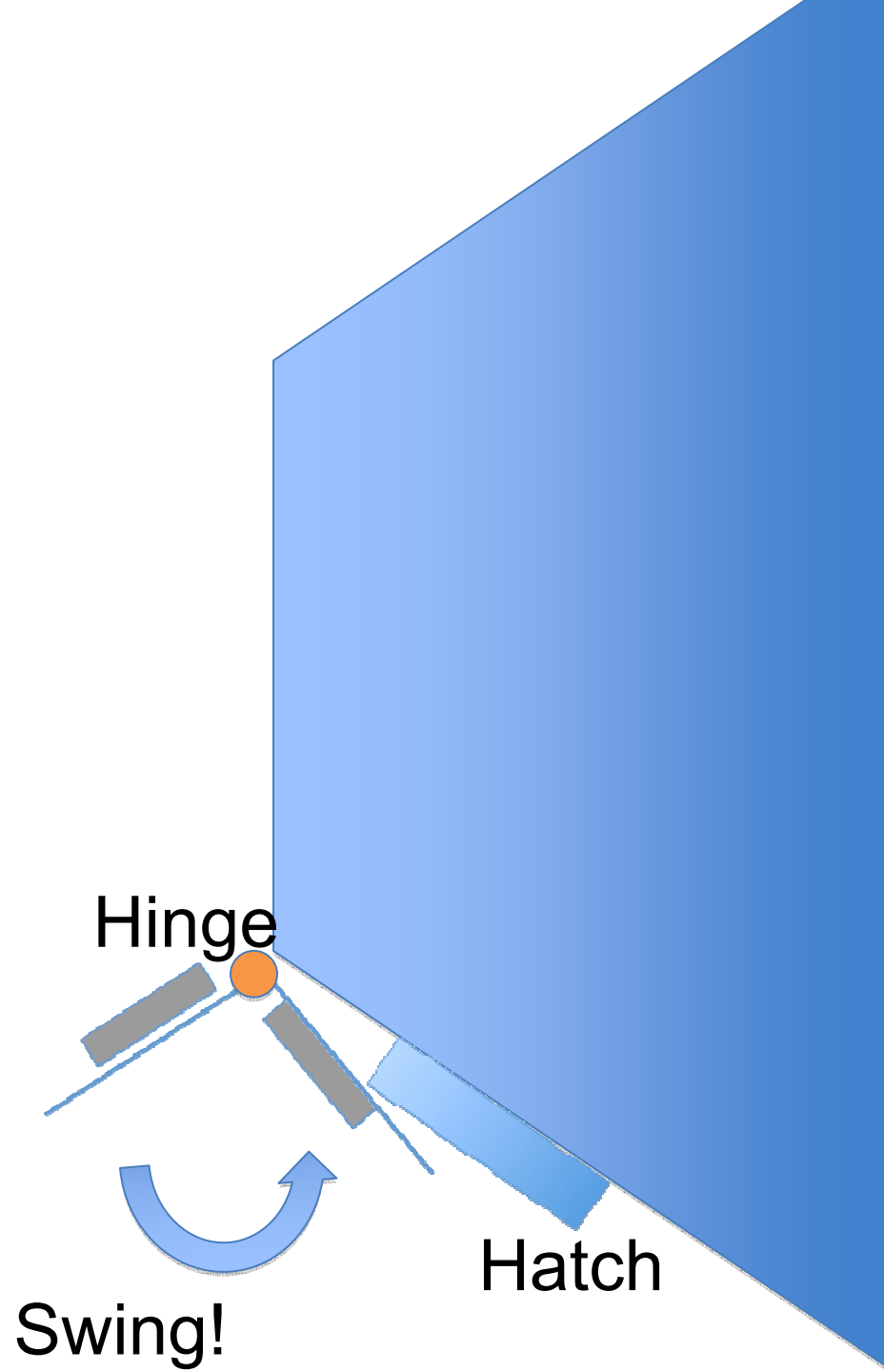
Itaru Nakagawa

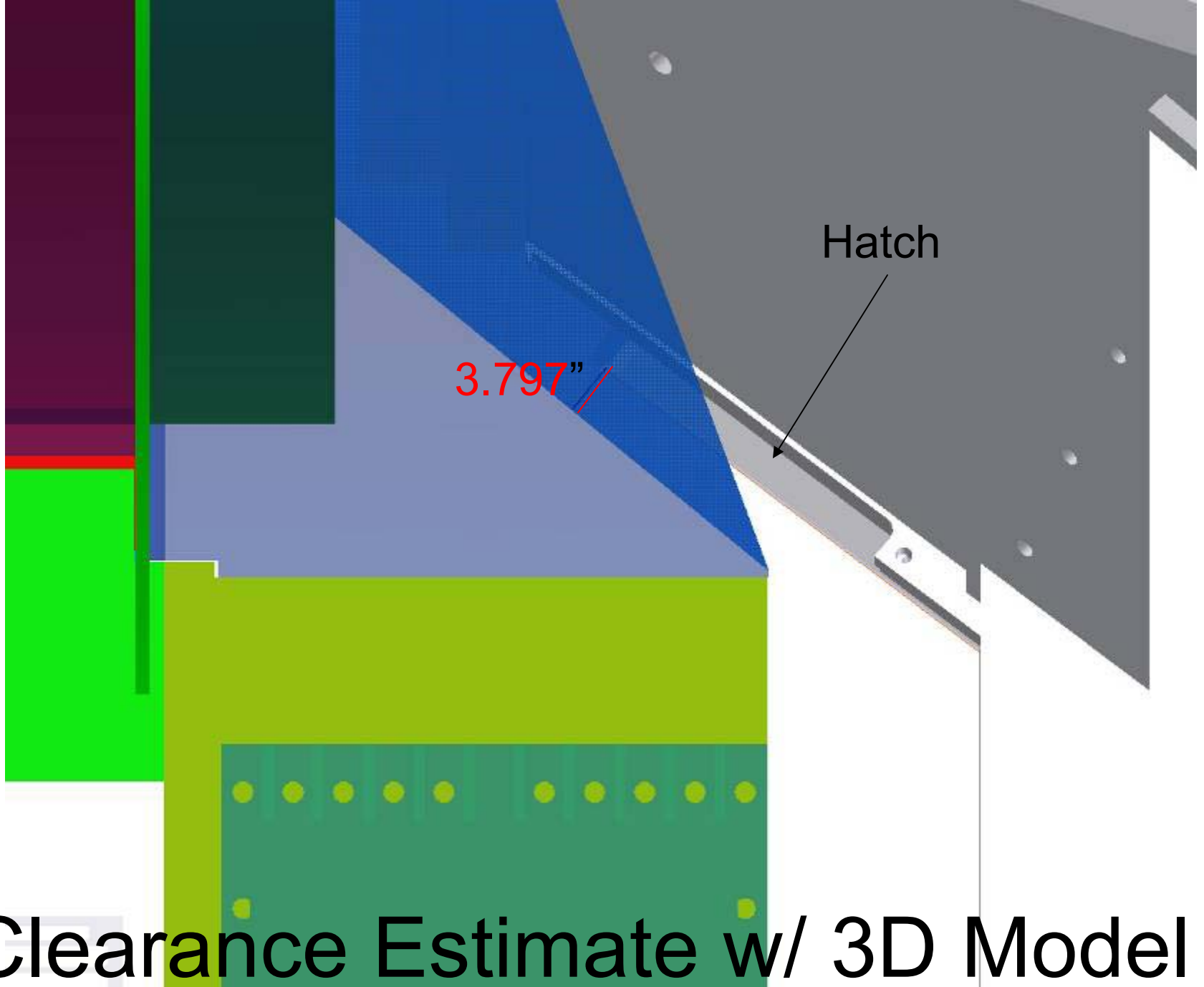
Station 1 Mount Design





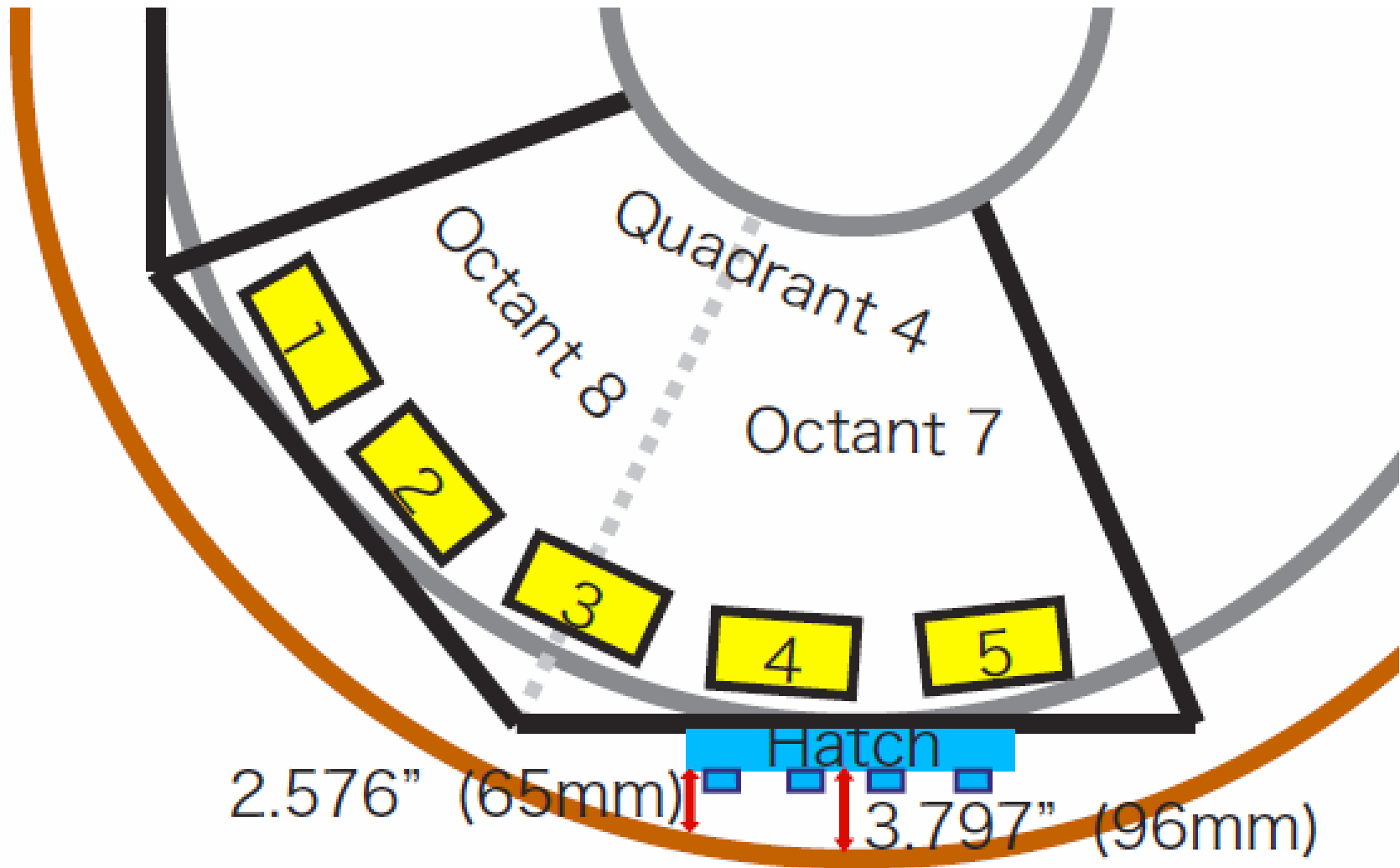
Difficulty in Station-1 Mount
Space in front of Hatch





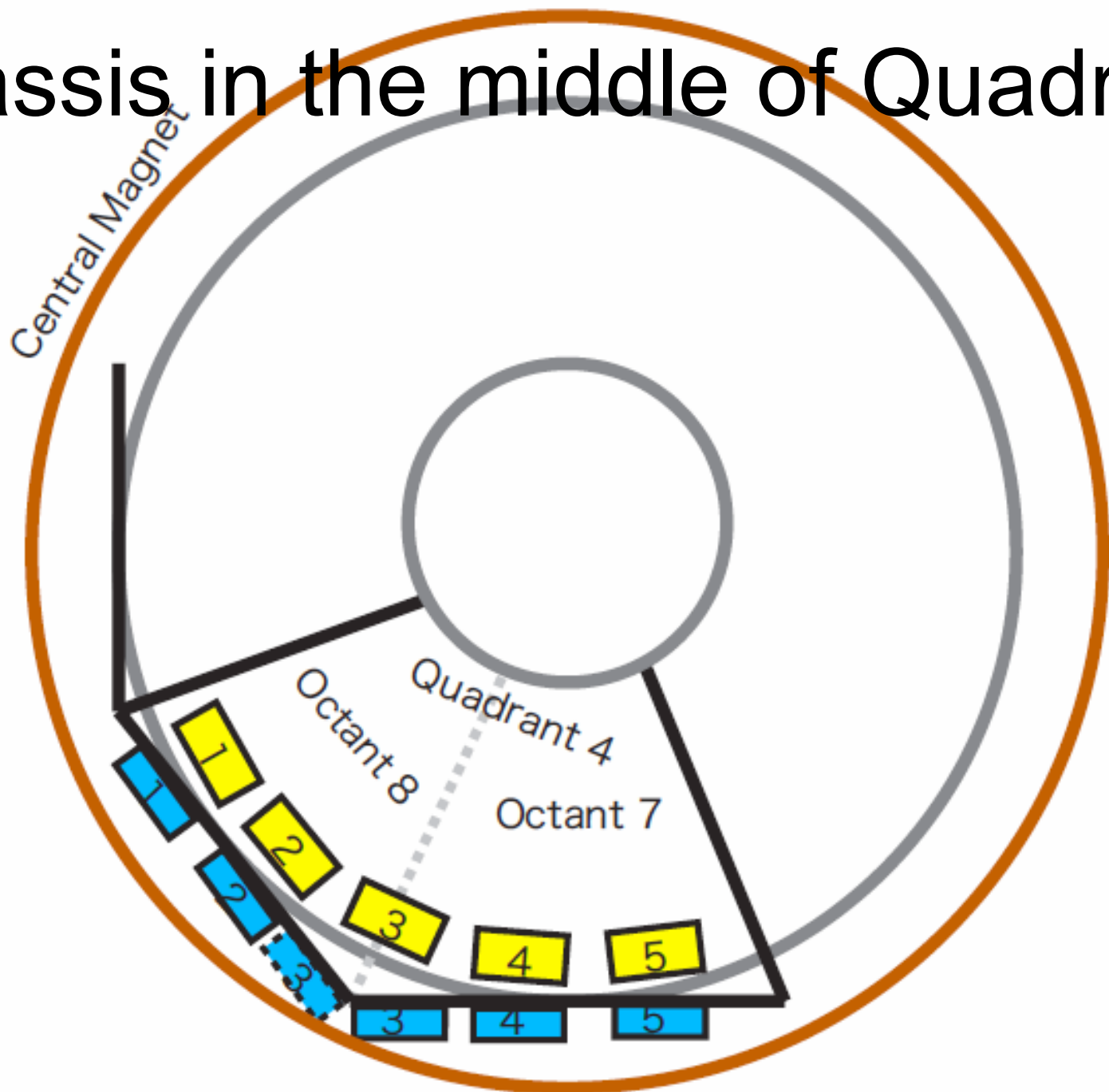
Clearance Estimate w/ 3D Model

Clearance Btwn Hatch

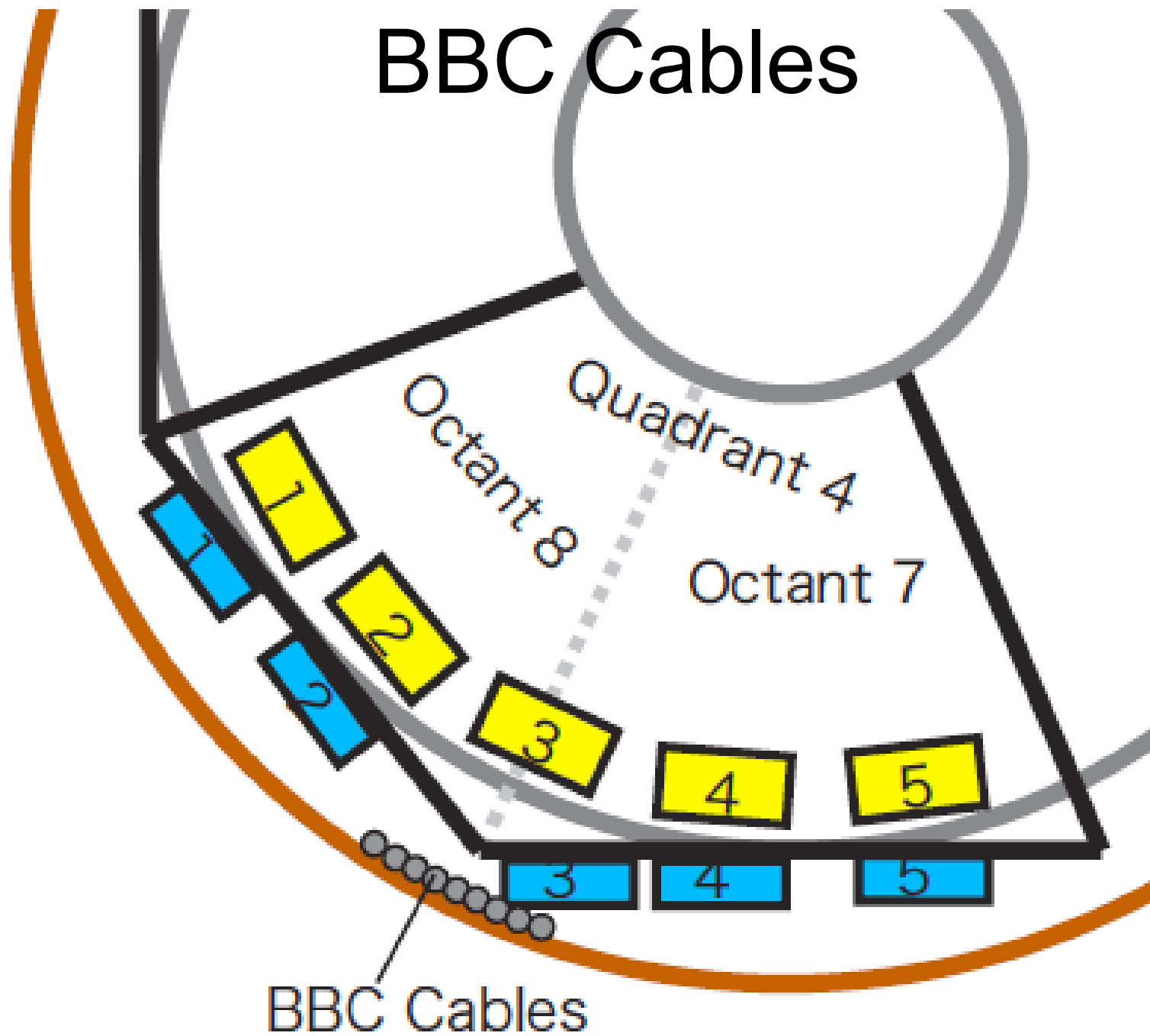


4 new Chassis (36mm)

Chassis in the middle of Quadrant

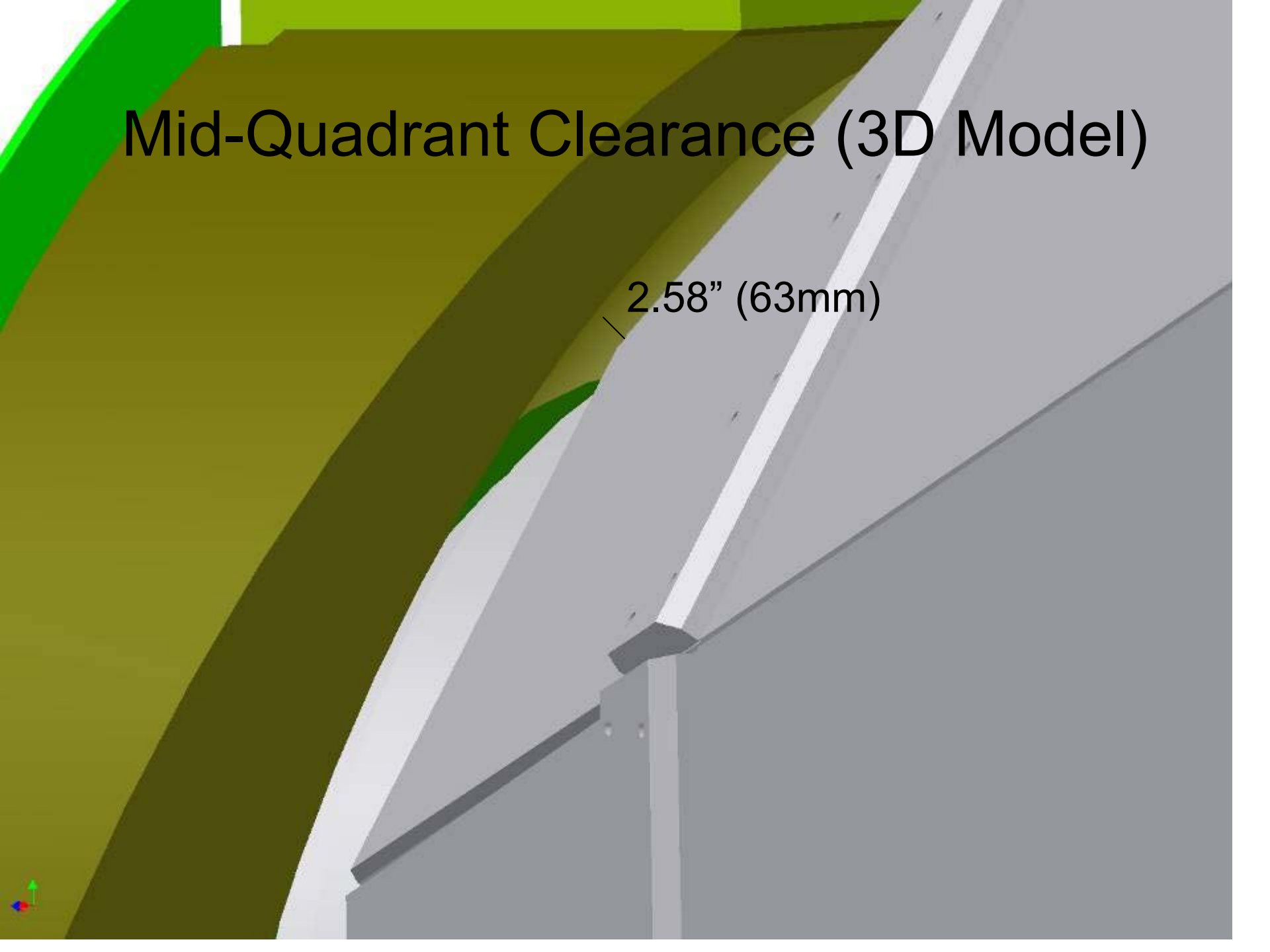


BBC Cables

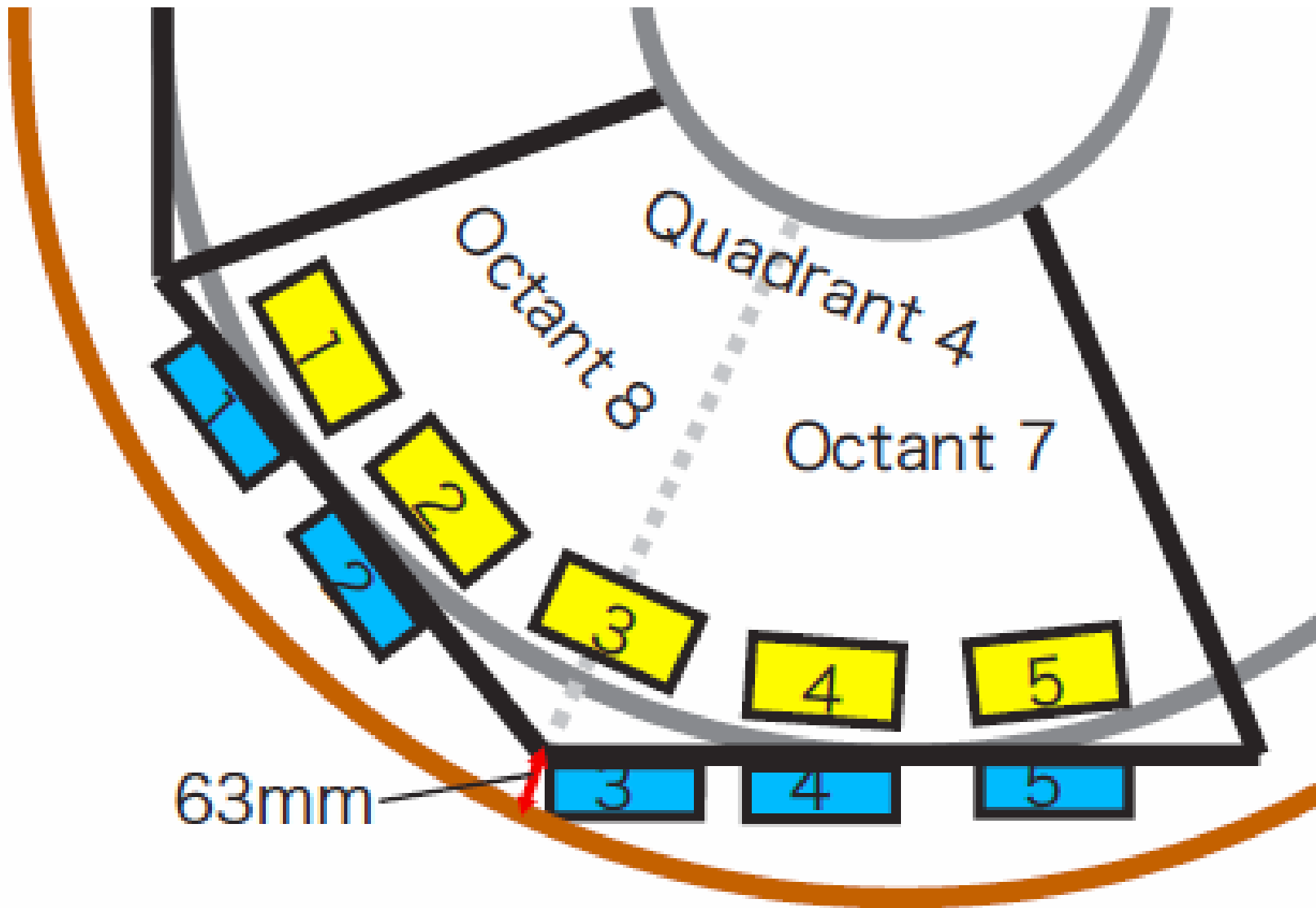


Mid-Quadrant Clearance (3D Model)

2.58" (63mm)



Mid-Quadrant Clearance

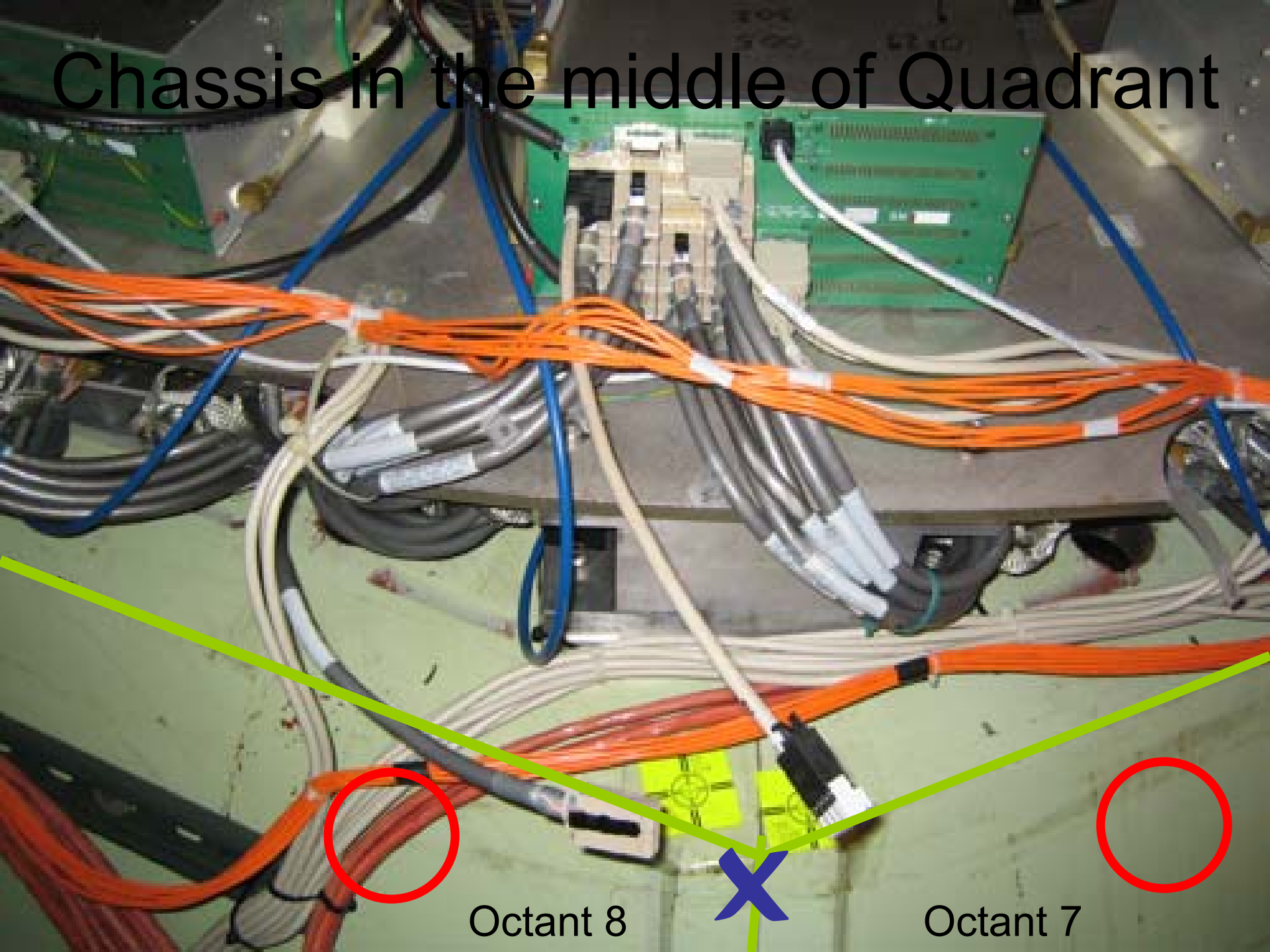


Chassis in the middle of Quadrant

Chamber → New FEE : Short by 15cm
New FEE → Existin' FEE: Short by 5cm



Chassis in the middle of Quadrant



Octant 8

Octant 7

Additional LV Channel

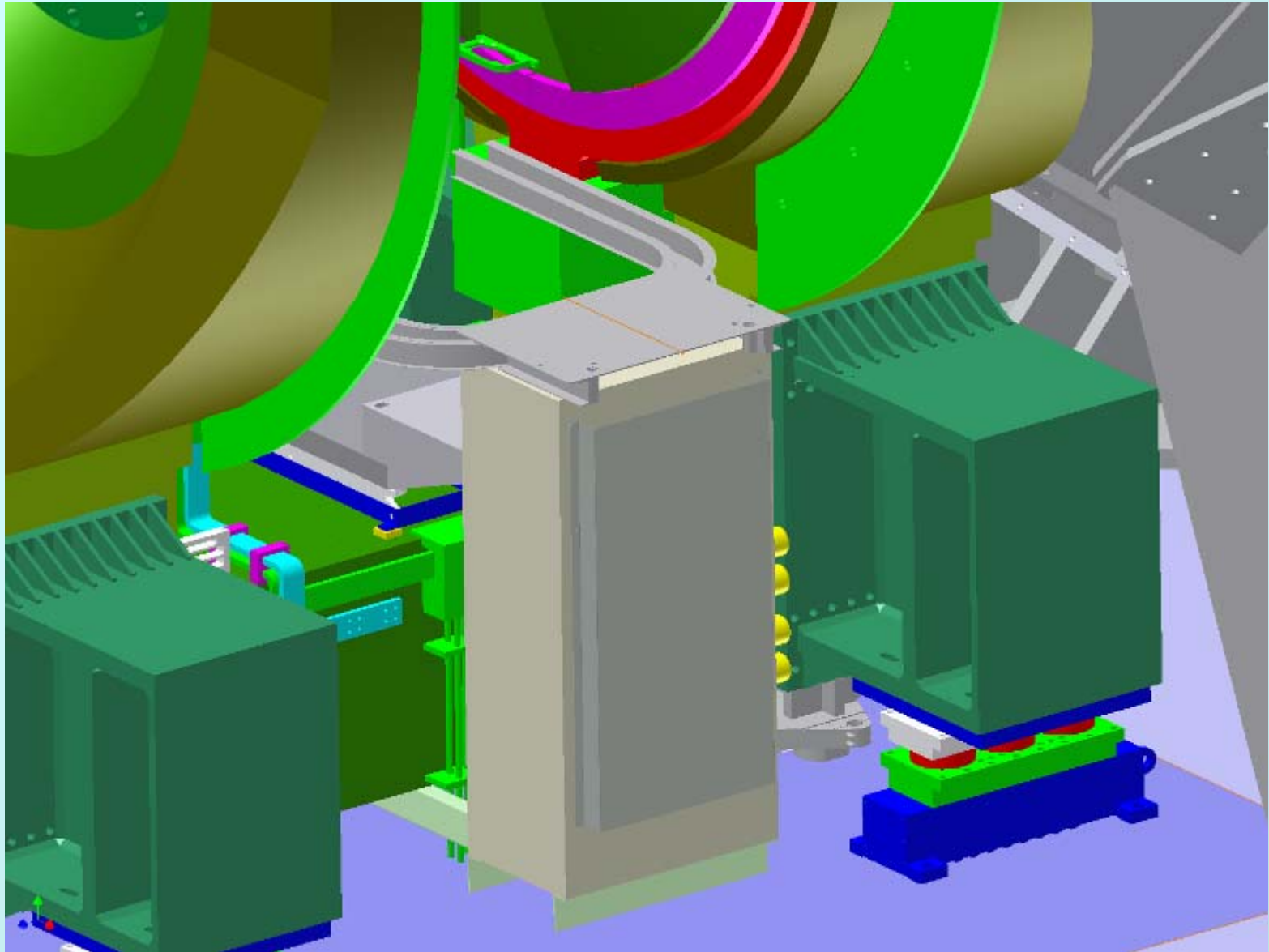
	Station-1	Station-2	Station-3	Total
North LV Channel	20+4	40	56	116+4

Number of Signal Cables stays same, because number of boards are conserved.

CM Access

Technical Support 2008





First-aid, DOE-Recordable, and DART Cases 4/23- 5 21

2 Recordable & DART, 1 First Aid

An employee fell while trying to cross the curbing between the west parking lot and the road adjacent to Building 400, injuring a knee and fracturing an ankle. DART & Recordable

An employee was bending over to place a bundle of cardboard on a two-foot tall table when he injured his lower back. First Aid

An employee was walking around a piece of equipment he was working on and tripped over an extension cord. Falling, he struck his right hand against steel scaffolding, injuring the knuckles at the base of the middle and ring fingers. Prescription drugs were prescribed by the treating physician and the employee has lost time. DART & Recordable

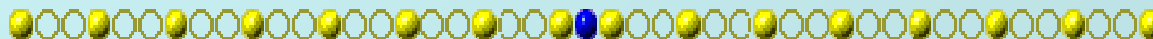
Where To Find PHENIX Engineering Info

Monday 5/26 is Memorial Day and a LAB Holiday.

Enjoy your long weekend and remember those who have sacrificed so that we can have all that we have.

Technical Support 2008

Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:



http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm